

SEQUENCE LISTING

<110> Bristol-Myers Squibb Company

<120> A NOVEL HUMAN G-PROTEIN COUPLED RECEPTOR, HGPRBMY23, EXPRESSED HIGHLY IN KIDNEY

<130> D0077 NP

<150> US 60/251,926

<151> 2000-12-07

<150> US 60/269,795

<151> 2001-02-14

<160> 55

<170> PatentIn version 3.0

<210> 1

<211> 1081

<212> DNA

<213> homo sapiens

<220>

<221> CDS

<222> (54)..(1064)

<400> 1

```

catattgccca aactgaactc tcttggtttc ttgcaagatg aaaggagaca acc atg      56
                                     Met
                                     1

aat gag cca cta gac tat tta gca aat gct tct gat ttc ccc gat tat      104
Asn Glu Pro Leu Asp Tyr Leu Ala Asn Ala Ser Asp Phe Pro Asp Tyr
      5                      10                      15

gca gct gct ttt gga aat tgc act gat gaa aac atc cca ctc aag atg      152
Ala Ala Ala Phe Gly Asn Cys Thr Asp Glu Asn Ile Pro Leu Lys Met
      20                      25                      30

cac tac ctc cct gtt att tat ggc att atc ttc ctc gtg gga ttt cca      200
His Tyr Leu Pro Val Ile Tyr Gly Ile Ile Phe Leu Val Gly Phe Pro
      35                      40                      45

ggc aat gca gta gtg ata tcc act tac att ttc aaa atg aga cct tgg      248
Gly Asn Ala Val Val Ile Ser Thr Tyr Ile Phe Lys Met Arg Pro Trp
      50                      55                      60                      65

aag agc agc acc atc att atg ctg aac ctg gcc tgc aca gat ctg ctg      296
Lys Ser Ser Thr Ile Ile Met Leu Asn Leu Ala Cys Thr Asp Leu Leu
      70                      75                      80

tat ctg acc agc ctc ccc ttc ctg att cac tac tat gcc agt ggc gaa      344
Tyr Leu Thr Ser Leu Pro Phe Leu Ile His Tyr Tyr Ala Ser Gly Glu
      85                      90                      95

```

aac tgg atc ttt gga gat ttc atg tgt aag ttt atc cgc ttc agc ttc Asn Trp Ile Phe Gly Asp Phe Met Cys Lys Phe Ile Arg Phe Ser Phe 100 105 110	392
cat ttc aac ctg tat agc agc atc ctc ttc ctc acc tgt ttc agc atc His Phe Asn Leu Tyr Ser Ser Ile Leu Phe Leu Thr Cys Phe Ser Ile 115 120 125	440
ttc cgc tac tgt gtg atc att cac cca atg agc tgc ttt tcc att cac Phe Arg Tyr Cys Val Ile Ile His Pro Met Ser Cys Phe Ser Ile His 130 135 140 145	488
aaa act cga tgt gca gtt gta gcc tgt gct gtg gtg tgg atc att tca Lys Thr Arg Cys Ala Val Val Ala Cys Ala Val Val Trp Ile Ile Ser 150 155 160	536
ctg gta gct gtc att ccg atg acc ttc ttg atc aca tca acc aac agg Leu Val Ala Val Ile Pro Met Thr Phe Leu Ile Thr Ser Thr Asn Arg 165 170 175	584
acc aac aga tca gcc tgt ctc gac ctc acc agt tgc gat gaa ctc aat Thr Asn Arg Ser Ala Cys Leu Asp Leu Thr Ser Ser Asp Glu Leu Asn 180 185 190	632
act att aag tgg tac aac ctg att ttg act gca act act ttc tgc ctc Thr Ile Lys Trp Tyr Asn Leu Ile Leu Thr Ala Thr Thr Phe Cys Leu 195 200 205	680
ccc ttg gtg ata gtg aca ctt tgc tat acc acg att atc cac act ctg Pro Leu Val Ile Val Thr Leu Cys Tyr Thr Thr Ile Ile His Thr Leu 210 215 220 225	728
acc cat gga ctg caa act gac agc tgc ctt aag cag aaa gca cga agg Thr His Gly Leu Gln Thr Asp Ser Cys Leu Lys Gln Lys Ala Arg Arg 230 235 240	776
cta acc att ctg cta ctc ctt gca ttt tac gta tgt ttt tta ccc ttc Leu Thr Ile Leu Leu Leu Leu Ala Phe Tyr Val Cys Phe Leu Pro Phe 245 250 255	824
cat atc ttg agg gtc att ccg atc gaa tct cgc ctg ctt tca atc agt His Ile Leu Arg Val Ile Arg Ile Glu Ser Arg Leu Leu Ser Ile Ser 260 265 270	872
tgt tcc att gag aat cag atc cat gaa gct tac atc gtt tct aga cca Cys Ser Ile Glu Asn Gln Ile His Glu Ala Tyr Ile Val Ser Arg Pro 275 280 285	920
tta gct gct ctg aac acc ttt ggt aac ctg tta cta tat gtg gtg gtc Leu Ala Ala Leu Asn Thr Phe Gly Asn Leu Leu Leu Tyr Val Val Val 290 295 300 305	968
agc gac aac ttt cag cag gct gtc tgc tca aca gtg aga tgc aaa gta Ser Asp Asn Phe Gln Gln Ala Val Cys Ser Thr Val Arg Cys Lys Val 310 315 320	1016
agc ggg aac ctt gag caa gca aag aaa att agt tac tca aac aac ccl	1064

Ser Gly Asn Leu Glu Gln Ala Lys Lys Ile Ser Tyr Ser Asn Asn Pro
 325 330 335

tgaaatattt catttac

1081

<210> 2
 <211> 337
 <212> PRT
 <213> homo sapiens

<400> 2

Met Asn Glu Pro Leu Asp Tyr Leu Ala Asn Ala Ser Asp Phe Pro Asp
 1 5 10 15

Tyr Ala Ala Ala Phe Gly Asn Cys Thr Asp Glu Asn Ile Pro Leu Lys
 20 25 30

Met His Tyr Leu Pro Val Ile Tyr Gly Ile Ile Phe Leu Val Gly Phe
 35 40 45

Pro Gly Asn Ala Val Val Ile Ser Thr Tyr Ile Phe Lys Met Arg Pro
 50 55 60

Trp Lys Ser Ser Thr Ile Ile Met Leu Asn Leu Ala Cys Thr Asp Leu
 65 70 75 80

Leu Tyr Leu Thr Ser Leu Pro Phe Leu Ile His Tyr Tyr Ala Ser Gly
 85 90 95

Glu Asn Trp Ile Phe Gly Asp Phe Met Cys Lys Phe Ile Arg Phe Ser
 100 105 110

Phe His Phe Asn Leu Tyr Ser Ser Ile Leu Phe Leu Thr Cys Phe Ser
 115 120 125

Ile Phe Arg Tyr Cys Val Ile Ile His Pro Met Ser Cys Phe Ser Ile
 130 135 140

His Lys Thr Arg Cys Ala Val Val Ala Cys Ala Val Val Trp Ile Ile
 145 150 155 160

Ser Leu Val Ala Val Ile Pro Met Thr Phe Leu Ile Thr Ser Thr Asn
 165 170 175

Arg Thr Asn Arg Ser Ala Cys Leu Asp Leu Thr Ser Ser Asp Glu Leu
180 185 190

Asn Thr Ile Lys Trp Tyr Asn Leu Ile Leu Thr Ala Thr Thr Phe Cys
195 200 205

Leu Pro Leu Val Ile Val Thr Leu Cys Tyr Thr Thr Ile Ile His Thr
210 215 220

Leu Thr His Gly Leu Gln Thr Asp Ser Cys Leu Lys Gln Lys Ala Arg
225 230 235 240

Arg Leu Thr Ile Leu Leu Leu Leu Ala Phe Tyr Val Cys Phe Leu Pro
245 250 255

Phe His Ile Leu Arg Val Ile Arg Ile Glu Ser Arg Leu Leu Ser Ile
260 265 270

Ser Cys Ser Ile Glu Asn Gln Ile His Glu Ala Tyr Ile Val Ser Arg
275 280 285

Pro Leu Ala Ala Leu Asn Thr Phe Gly Asn Leu Leu Leu Tyr Val Val
290 295 300

Val Ser Asp Asn Phe Gln Gln Ala Val Cys Ser Thr Val Arg Cys Lys
305 310 315 320

Val Ser Gly Asn Leu Glu Gln Ala Lys Lys Ile Ser Tyr Ser Asn Asn
325 330 335

Pro

<210> 3
<211> 362
<212> PRT
<213> GALLUS GALLUS

<400> 3

Met Thr Glu Ala Leu Ile Ser Ala Ala Leu Asn Gly Thr Gln Pro Glu
1 5 10 15

Leu Leu Ala Gly Gly Trp Ala Ala Gly Asn Ala Thr Thr Lys Cys Ser
20 25 30

Leu Thr Lys Thr Gly Phe Gln Phe Tyr Tyr Leu Pro Thr Val Tyr Ile
 35 40 45
 Leu Val Phe Ile Thr Gly Phe Leu Gly Asn Ser Val Ala Ile Trp Met
 50 55 60
 Phe Val Phe His Met Arg Pro Trp Ser Gly Ile Ser Val Tyr Met Phe
 65 70 75 80
 Asn Leu Ala Leu Ala Asp Phe Leu Tyr Val Leu Thr Leu Pro Ala Leu
 85 90 95
 Ile Phe Tyr Tyr Phe Asn Lys Thr Asp Trp Ile Phe Gly Asp Val Met
 100 105 110
 Cys Lys Leu Gln Arg Phe Ile Phe His Val Asn Leu Tyr Gly Ser Ile
 115 120 125
 Leu Phe Leu Thr Cys Ile Ser Val His Arg Tyr Thr Gly Val Val His
 130 135 140
 Pro Leu Lys Ser Leu Gly Arg Leu Lys Lys Lys Asn Ala Val Tyr Val
 145 150 155 160
 Ser Ser Leu Val Trp Ala Leu Val Val Ala Val Ile Ala Pro Ile Leu
 165 170 175
 Phe Tyr Ser Gly Thr Gly Val Arg Arg Asn Lys Thr Ile Thr Cys Tyr
 180 185 190
 Asp Thr Thr Ala Asp Glu Tyr Leu Arg Ser Tyr Phe Val Tyr Ser Met
 195 200 205
 Cys Thr Thr Val Phe Met Phe Cys Ile Pro Phe Ile Val Ile Leu Gly
 210 215 220
 Cys Tyr Gly Leu Ile Val Lys Ala Leu Ile Tyr Lys Asp Leu Asp Asn
 225 230 235 240
 Ser Pro Leu Arg Arg Lys Ser Ile Tyr Leu Val Ile Ile Val Leu Thr
 245 250 255
 Val Phe Ala Val Ser Tyr Leu Pro Phe His Val Met Lys Thr Leu Asn
 260 265 270
 Leu Arg Ala Arg Leu Asp Phe Gln Thr Pro Gln Met Cys Ala Phe Asn
 275 280 285
 Asp Lys Val Tyr Ala Thr Tyr Gln Val Thr Arg Gly Leu Ala Ser Leu
 290 295 300
 Asn Ser Cys Val Asp Pro Ile Leu Tyr Phe Leu Ala Gly Asp Thr Phe
 305 310 315 320
 Arg Arg Arg Leu Ser Arg Ala Thr Arg Lys Ser Ser Arg Arg Ser Glu
 325 330 335

Pro Asn Val Gln Ser Lys Ser Glu Glu Met Thr Leu Asn Ile Leu Thr
 340 345 350

Glu Tyr Lys Gln Asn Gly Asp Thr Ser Leu
 355 360

<210> 4
 <211> 362
 <212> PRT
 <213> MELEAGRIS GALLOPAVO

<400> 4

Met Thr Glu Ala Leu Ile Ser Ala Ala Leu Asn Gly Thr Gln Pro Glu
 1 5 10 15

Leu Leu Ala Gly Gly Trp Ala Ala Gly Asn Ala Ser Thr Lys Cys Ser
 20 25 30

Leu Thr Lys Thr Gly Phe Gln Phe Tyr Tyr Leu Pro Thr Val Tyr Ile
 35 40 45

Leu Val Phe Ile Thr Gly Phe Leu Gly Asn Ser Val Ala Ile Trp Met
 50 55 60

Phe Val Phe His Met Arg Pro Trp Ser Gly Ile Ser Val Tyr Met Phe
 65 70 75 80

Asn Leu Ala Leu Ala Asp Phe Leu Tyr Val Leu Thr Leu Pro Ala Leu
 85 90 95

Ile Phe Tyr Tyr Phe Asn Lys Thr Asp Trp Ile Phe Gly Asp Val Met
 100 105 110

Cys Lys Leu Gln Arg Phe Ile Phe His Val Asn Leu Tyr Gly Ser Ile
 115 120 125

Leu Phe Leu Thr Cys Ile Ser Val His Arg Tyr Thr Gly Val Val His
 130 135 140

Pro Leu Lys Ser Leu Gly Arg Leu Lys Lys Lys Asn Ala Val Tyr Val
 145 150 155 160

Ser Ser Leu Val Trp Ala Leu Val Val Ala Val Ile Ala Pro Ile Leu
 165 170 175

Phe Tyr Ser Gly Thr Gly Val Arg Arg Asn Lys Thr Ile Thr Cys Tyr
 180 185 190

Asp Thr Thr Ala Asp Glu Tyr Leu Arg Ser Tyr Phe Val Tyr Ser Met
 195 200 205

Cys Thr Thr Val Phe Met Phe Cys Ile Pro Phe Ile Val Ile Leu Gly
 210 215 220

Cys Tyr Gly Leu Ile Val Lys Ala Leu Ile Tyr Lys Asp Leu Asp Asn
 225 230 235 240

10040568.120704

Ser Pro Leu Arg Arg Lys Ser Ile Tyr Leu Val Ile Ile Val Leu Thr
 245 250 255
 Val Phe Ala Val Ser Tyr Leu Pro Phe His Val Met Lys Thr Leu Asn
 260 265 270
 Leu Arg Ala Arg Leu Asp Phe Gln Thr Pro Gln Met Cys Ala Phe Asn
 275 280 285
 Asp Lys Val Tyr Ala Thr Tyr Gln Val Thr Arg Gly Leu Ala Ser Leu
 290 295 300
 Asn Ser Cys Val Asp Pro Ile Leu Tyr Phe Leu Ala Gly Asp Thr Phe
 305 310 315 320
 Arg Arg Arg Leu Ser Arg Ala Thr Arg Lys Ser Ser Arg Arg Ser Glu
 325 330 335
 Pro Asn Val Gln Ser Lys Ser Glu Glu Met Thr Leu Asn Ile Leu Thr
 340 345 350
 Glu Tyr Lys Gln Asn Gly Asp Thr Ser Leu
 355 360

<210> 5
 <211> 373
 <212> PRT
 <213> MUS MUSCULUS

<400> 5

Met Thr Glu Val Pro Trp Ser Val Val Pro Asn Gly Thr Asp Ala Ala
 1 5 10 15
 Phe Leu Ala Gly Leu Gly Ser Leu Trp Gly Asn Ser Thr Val Ala Ser
 20 25 30
 Thr Ala Ala Val Ser Ser Ser Phe Gln Cys Ala Leu Thr Lys Thr Gly
 35 40 45
 Phe Gln Phe Tyr Tyr Leu Pro Ala Val Tyr Ile Leu Val Phe Ile Ile
 50 55 60
 Gly Phe Leu Gly Asn Ser Val Ala Ile Trp Met Phe Val Phe His Met
 65 70 75 80
 Lys Pro Trp Ser Gly Ile Ser Val Tyr Met Phe Asn Leu Ala Leu Ala
 85 90 95
 Asp Phe Leu Tyr Val Leu Thr Leu Pro Ala Leu Ile Phe Tyr Tyr Phe
 100 105 110
 Asn Lys Thr Asp Trp Ile Phe Gly Asp Ala Met Cys Lys Leu Gln Arg
 115 120 125
 Phe Ile Phe His Val Asn Leu Tyr Gly Ser Ile Leu Phe Leu Thr Cys

10010568-120701

Phe Leu Ala Gly Leu Gly Ser Leu Trp Gly Asn Ser Thr Ile Ala Ser
20 25 30

Thr Ala Ala Val Ser Ser Ser Phe Arg Cys Ala Leu Ile Lys Thr Gly
35 40 45

Phe Gln Phe Tyr Tyr Leu Pro Ala Val Tyr Ile Leu Val Phe Ile Ile
50 55 60

Gly Phe Leu Gly Asn Ser Val Ala Ile Trp Met Phe Val Phe His Met
65 70 75 80

Lys Pro Trp Ser Gly Ile Ser Val Tyr Met Phe Asn Leu Ala Leu Ala
85 90 95

Asp Phe Leu Tyr Val Leu Thr Leu Pro Ala Leu Ile Phe Tyr Tyr Phe
100 105 110

Asn Lys Thr Asp Trp Ile Phe Gly Asp Val Met Cys Lys Leu Gln Arg
115 120 125

Phe Ile Phe His Val Asn Leu Tyr Gly Ser Ile Leu Phe Leu Thr Cys
130 135 140

Ile Ser Ala His Arg Tyr Ser Gly Val Val Tyr Pro Leu Lys Ser Leu
145 150 155 160

Gly Arg Leu Lys Lys Lys Asn Ala Ile Tyr Val Ser Val Leu Val Trp
165 170 175

Leu Ile Val Val Val Ala Ile Ser Pro Ile Leu Phe Tyr Ser Gly Thr
180 185 190

Gly Ile Arg Lys Asn Lys Thr Val Thr Cys Tyr Asp Ser Thr Ser Asp
195 200 205

Glu Tyr Leu Arg Ser Tyr Phe Ile Tyr Ser Met Cys Thr Thr Val Ala
210 215 220

Met Phe Cys Ile Pro Leu Val Leu Ile Leu Gly Cys Tyr Gly Leu Ile
225 230 235 240

Val Arg Ala Leu Ile Tyr Lys Asp Leu Asp Asn Ser Pro Leu Arg Arg
245 250 255

Lys Ser Ile Tyr Leu Val Ile Ile Val Leu Thr Val Phe Ala Val Ser
260 265 270

Tyr Ile Pro Phe His Val Met Lys Thr Met Asn Leu Arg Ala Arg Leu
275 280 285

Asp Phe Gln Thr Pro Glu Met Cys Asp Phe Asn Asp Arg Val Tyr Ala
290 295 300

Thr Tyr Gln Val Thr Arg Gly Leu Ala Ser Leu Asn Ser Cys Val Asp
305 310 315 320

Pro Ile Leu Tyr Phe Leu Ala Gly Asp Thr Phe Arg Arg Arg Leu Ser
325 330 335

Arg Ala Thr Arg Lys Ala Ser Arg Arg Ser Glu Ala Asn Leu Gln Ser
340 345 350

Lys Ser Glu Glu Met Thr Leu Asn Ile Leu Ser Glu Phe Lys Gln Asn
355 360 365

Gly Asp Thr Ser Leu
370

<210> 7

<211> 373

<212> PRT

<213> BOS TAURUS

<400> 7

Met Thr Glu Val Leu Trp Pro Ala Val Pro Asn Gly Thr Asp Thr Ala
1 5 10 15

Phe Leu Ala Asp Pro Gly Ser Pro Trp Gly Asn Ser Thr Val Thr Ser
20 25 30

Thr Ala Ala Val Ala Ser Pro Phe Lys Cys Ala Leu Thr Lys Thr Gly
35 40 45

Phe Gln Phe Tyr Tyr Leu Pro Ala Val Tyr Ile Leu Val Phe Ile Ile
50 55 60

Gly Phe Leu Gly Asn Ser Val Ala Ile Trp Met Phe Val Phe His Met
65 70 75 80

Lys Pro Trp Ser Gly Ile Ser Val Tyr Met Phe Asn Leu Ala Leu Ala
85 90 95

Asp Phe Leu Tyr Val Leu Thr Leu Pro Ala Leu Ile Phe Tyr Tyr Phe
100 105 110

Asn Lys Thr Asp Trp Ile Phe Gly Asp Ala Met Cys Lys Leu Gln Arg
115 120 125

Phe Ile Phe His Val Asn Leu Tyr Gly Ser Ile Leu Phe Leu Thr Cys
130 135 140

Ile Ser Ala His Arg Tyr Ser Gly Val Val Tyr Pro Leu Lys Ser Leu
145 150 155 160

Gly Arg Leu Lys Lys Lys Asn Ala Val Tyr Ile Ser Val Leu Val Trp
165 170 175

Leu Ile Val Val Val Gly Ile Ser Pro Ile Leu Phe Tyr Ser Gly Thr
180 185 190

Gly Ile Arg Lys Asn Lys Thr Ile Thr Cys Tyr Asp Thr Thr Ser Asp
195 200 205

10010566-120704

Glu Tyr Leu Arg Ser Tyr Phe Ile Tyr Ser Met Cys Thr Thr Val Ala
210 215 220

Met Phe Cys Val Pro Leu Val Leu Ile Leu Gly Cys Tyr Gly Leu Ile
225 230 235 240

Val Arg Ala Leu Ile Tyr Lys Asp Leu Asp Asn Ser Pro Leu Arg Arg
245 250 255

Lys Ser Ile Tyr Leu Val Ile Ile Val Leu Thr Val Phe Ala Val Ser
260 265 270

Tyr Ile Pro Phe His Val Met Lys Thr Met Asn Leu Arg Ala Arg Leu
275 280 285

Asp Phe Gln Thr Pro Glu Met Cys Ala Phe Asn Asp Arg Val Tyr Ala
290 295 300

Thr Tyr Gln Val Thr Arg Gly Leu Ala Ser Leu Asn Ser Cys Val Asp
305 310 315 320

Pro Ile Leu Tyr Phe Leu Ala Gly Asp Thr Phe Arg Arg Arg Leu Ser
325 330 335

Arg Ala Thr Arg Lys Ala Ser Arg Arg Ser Glu Ala Asn Leu Gln Ser
340 345 350

Lys Ser Glu Asp Met Thr Leu Asn Ile Leu Ser Glu Phe Lys Gln Asn
355 360 365

Gly Asp Thr Ser Leu
370

<210> 8
<211> 373
<212> PRT
<213> homo sapiens

<400> 8

Met Thr Glu Val Leu Trp Pro Ala Val Pro Asn Gly Thr Asp Ala Ala
1 5 10 15

Phe Leu Ala Gly Pro Gly Ser Ser Trp Gly Asn Ser Thr Val Ala Ser
20 25 30

Thr Ala Ala Val Ser Ser Ser Phe Lys Cys Ala Leu Thr Lys Thr Gly
35 40 45

Phe Gln Phe Tyr Tyr Leu Pro Ala Val Tyr Ile Leu Val Phe Ile Ile
50 55 60

Gly Phe Leu Gly Asn Ser Val Ala Ile Trp Met Phe Val Phe His Met
65 70 75 80

Lys Pro Trp Ser Gly Ile Ser Val Tyr Met Phe Asn Leu Ala Leu Ala

10010560 "120700"

85					90					95					
Asp	Phe	Leu	Tyr	Val	Leu	Thr	Leu	Pro	Ala	Leu	Ile	Phe	Tyr	Tyr	Phe
		100						105					110		
Asn	Lys	Thr	Asp	Trp	Ile	Phe	Gly	Asp	Ala	Met	Cys	Lys	Leu	Gln	Arg
		115					120					125			
Phe	Ile	Phe	His	Val	Asn	Leu	Tyr	Gly	Ser	Ile	Leu	Phe	Leu	Thr	Cys
	130					135					140				
Ile	Ser	Ala	His	Arg	Tyr	Ser	Gly	Val	Val	Tyr	Pro	Leu	Lys	Ser	Leu
	145					150					155				160
Gly	Arg	Leu	Lys	Lys	Lys	Asn	Ala	Ile	Cys	Ile	Ser	Val	Leu	Val	Trp
			165						170					175	
Leu	Ile	Val	Val	Val	Ala	Ile	Ser	Pro	Ile	Leu	Phe	Tyr	Ser	Gly	Thr
		180						185					190		
Gly	Val	Arg	Lys	Asn	Lys	Thr	Ile	Thr	Cys	Tyr	Asp	Thr	Thr	Ser	Asp
		195					200					205			
Glu	Tyr	Leu	Arg	Ser	Tyr	Phe	Ile	Tyr	Ser	Met	Cys	Thr	Thr	Val	Ala
	210					215					220				
Met	Phe	Cys	Val	Pro	Leu	Val	Leu	Ile	Leu	Gly	Cys	Tyr	Gly	Leu	Ile
	225					230					235				240
Val	Arg	Ala	Leu	Ile	Tyr	Lys	Asp	Leu	Asp	Asn	Ser	Pro	Leu	Arg	Arg
			245					250						255	
Lys	Ser	Ile	Tyr	Leu	Val	Ile	Ile	Val	Leu	Thr	Val	Phe	Ala	Val	Ser
			260					265					270		
Tyr	Ile	Pro	Phe	His	Val	Met	Lys	Thr	Met	Asn	Leu	Arg	Ala	Arg	Leu
		275					280					285			
Asp	Phe	Gln	Thr	Pro	Ala	Met	Cys	Ala	Phe	Asn	Asp	Arg	Val	Tyr	Ala
		290				295					300				
Thr	Tyr	Gln	Val	Thr	Arg	Gly	Leu	Ala	Ser	Leu	Asn	Ser	Cys	Val	Asp
	305					310					315				320
Pro	Ile	Leu	Tyr	Phe	Leu	Ala	Gly	Asp	Thr	Phe	Arg	Arg	Arg	Leu	Ser
			325					330						335	
Arg	Ala	Thr	Arg	Lys	Ala	Ser	Arg	Arg	Ser	Glu	Ala	Asn	Leu	Gln	Ser
			340					345					350		
Lys	Ser	Glu	Asp	Met	Thr	Leu	Asn	Ile	Leu	Pro	Glu	Phe	Lys	Gln	Asn
		355					360					365			
Gly	Asp	Thr	Ser	Leu											
		370													

<210> 9

<211> 361
 <212> PRT
 <213> RATTUS NORVEGICUS

<400> 9

Met	Thr	Ser	Ala	Glu	Ser	Leu	Leu	Phe	Thr	Ser	Leu	Gly	Pro	Ser	Pro	1	5	10	15
Ser	Ser	Gly	Asp	Gly	Asp	Cys	Arg	Phe	Asn	Glu	Glu	Phe	Lys	Phe	Ile	20	25	30	
Leu	Leu	Pro	Met	Ser	Tyr	Ala	Val	Val	Phe	Val	Leu	Gly	Leu	Ala	Leu	35	40	45	
Asn	Ala	Pro	Thr	Leu	Trp	Leu	Phe	Leu	Phe	Arg	Leu	Arg	Pro	Trp	Asp	50	55	60	
Ala	Thr	Ala	Thr	Tyr	Met	Phe	His	Leu	Ala	Leu	Ser	Asp	Thr	Leu	Tyr	65	70	75	80
Val	Leu	Ser	Leu	Pro	Thr	Leu	Val	Tyr	Tyr	Tyr	Ala	Ala	Arg	Asn	His	85	90	95	
Trp	Pro	Phe	Gly	Thr	Gly	Leu	Cys	Lys	Phe	Val	Arg	Phe	Leu	Phe	Tyr	100	105	110	
Trp	Asn	Leu	Tyr	Cys	Ser	Val	Leu	Phe	Leu	Thr	Cys	Ile	Ser	Val	His	115	120	125	
Arg	Tyr	Leu	Gly	Ile	Cys	His	Pro	Leu	Arg	Ala	Ile	Arg	Trp	Gly	Arg	130	135	140	
Pro	Arg	Phe	Ala	Ser	Leu	Leu	Cys	Leu	Gly	Val	Trp	Leu	Val	Val	Ala	145	150	155	160
Gly	Cys	Leu	Val	Pro	Asn	Leu	Phe	Phe	Val	Thr	Thr	Asn	Ala	Asn	Gly	165	170	175	
Thr	Thr	Ile	Leu	Cys	His	Asp	Thr	Thr	Leu	Pro	Glu	Glu	Phe	Asp	His	180	185	190	
Tyr	Val	Tyr	Phe	Ser	Ser	Ala	Val	Met	Val	Leu	Leu	Phe	Gly	Leu	Pro	195	200	205	
Phe	Leu	Ile	Thr	Leu	Val	Cys	Tyr	Gly	Leu	Met	Ala	Arg	Arg	Leu	Tyr	210	215	220	
Arg	Pro	Leu	Pro	Gly	Ala	Gly	Gln	Ser	Ser	Ser	Arg	Leu	Arg	Ser	Leu	225	230	235	240
Arg	Thr	Ile	Ala	Val	Val	Leu	Thr	Val	Phe	Ala	Val	Cys	Phe	Val	Pro	245	250	255	
Phe	His	Ile	Thr	Arg	Thr	Ile	Tyr	Tyr	Gln	Ala	Arg	Leu	Leu	Gln	Ala	260	265	270	

10040558.120701

Asp Cys His Val Leu Asn Ile Val Asn Val Val Tyr Lys Val Thr Arg
 275 280 285

Pro Leu Ala Ser Ala Asn Ser Cys Leu Asp Pro Val Leu Tyr Leu Phe
 290 295 300

Thr Gly Asp Lys Tyr Arg Asn Gln Leu Gln Gln Leu Cys Arg Gly Ser
 305 310 315 320

Lys Pro Lys Pro Arg Thr Ala Ala Ser Ser Leu Ala Leu Val Thr Leu
 325 330 335

His Glu Glu Ser Ile Ser Arg Trp Ala Asp Thr His Gln Asp Ser Thr
 340 345 350

Phe Ser Ala Tyr Glu Gly Asp Arg Leu
 355 360

<210> 10
 <211> 328
 <212> PRT
 <213> homo sapiens

<400> 10

Met Ser Met Ala Asn Phe Thr Gly Gly Arg Asn Ser Cys Thr Phe His
 1 5 10 15

Glu Glu Phe Lys Gln Val Leu Leu Pro Leu Val Tyr Ser Val Val Phe
 20 25 30

Leu Leu Gly Leu Pro Leu Asn Ala Val Val Ile Gly Gln Ile Trp Leu
 35 40 45

Ala Arg Lys Ala Leu Thr Arg Thr Thr Ile Tyr Met Leu Asn Leu Ala
 50 55 60

Met Ala Asp Leu Leu Tyr Val Cys Ser Leu Pro Leu Leu Ile Tyr Asn
 65 70 75 80

Tyr Thr Gln Lys Asp Tyr Trp Pro Phe Gly Asp Phe Thr Cys Lys Phe
 85 90 95

Val Arg Phe Gln Phe Tyr Thr Asn Leu His Gly Ser Ile Leu Phe Leu
 100 105 110

Thr Cys Ile Ser Val Gln Arg Tyr Met Gly Ile Cys His Pro Leu Ala
 115 120 125

Ser Trp His Lys Lys Lys Gly Lys Lys Leu Thr Trp Leu Val Cys Ala
 130 135 140

Ala Val Trp Phe Ile Val Ile Ala Gln Cys Leu Pro Thr Phe Val Phe
 145 150 155 160

Ala Ser Thr Gly Thr Gln Arg Asn Arg Thr Val Cys Tyr Asp Leu Ser
 165 170 175

10010558-120704

Pro Pro Asp Arg Ser Thr Ser Tyr Phe Pro Tyr Gly Ile Thr Leu Thr
180 185 190

Ile Thr Gly Phe Leu Leu Pro Phe Ala Ala Ile Leu Ala Cys Tyr Cys
195 200 205

Ser Met Ala Arg Ile Leu Cys Gln Lys Asp Glu Leu Ile Gly Leu Ala
210 215 220

Val His Lys Lys Lys Asp Lys Ala Val Arg Met Ile Ile Ile Val Val
225 230 235 240

Ile Val Phe Ser Ile Ser Phe Phe Pro Phe His Leu Thr Lys Thr Ile
245 250 255

Tyr Leu Ile Val Arg Ser Ser Ala Ser Leu Pro Cys Pro Thr Leu Gln
260 265 270

Ala Phe Ala Ile Ala Tyr Lys Cys Thr Arg Pro Phe Ala Ser Met Asn
275 280 285

Ser Val Leu Asp Pro Ile Leu Phe Tyr Phe Thr Gln Arg Lys Phe Arg
290 295 300

Glu Ser Thr Arg Tyr Leu Leu Asp Lys Met Ser Ser Lys Trp Arg Gln
305 310 315 320

Asp His Cys Ile Ser Tyr Gly Ser
325

<210> 11
<211> 374
<212> PRT
<213> MELEAGRIS GALLOPAVO

<400> 11

Met Asp Ala Pro Val Arg Met Phe Ser Leu Ala Pro Trp Thr Pro Thr
1 5 10 15

Pro Thr Pro Trp Leu Gly Gly Asn Thr Thr Ala Ala Ala Glu Ala Lys
20 25 30

Cys Val Phe Asn Glu Glu Phe Lys Phe Ile Leu Leu Pro Ile Ser Tyr
35 40 45

Gly Ile Val Phe Val Val Gly Leu Pro Leu Asn Ser Trp Ala Met Trp
50 55 60

Ile Phe Val Ser Arg Met Arg Pro Trp Asn Ala Thr Thr Thr Tyr Met
65 70 75 80

Phe Asn Leu Ala Ile Ser Asp Thr Leu Tyr Val Phe Ser Leu Pro Thr
85 90 95

Leu Val Tyr Tyr Tyr Ala Asp Arg Asn Asn Trp Pro Phe Gly Lys Val

100	105	110
Phe Cys Lys Ile Val Arg Phe Leu Phe Tyr Ala Asn Leu Tyr Ser Ser		
115	120	125
Ile Leu Phe Leu Thr Cys Ile Ser Val His Arg Tyr Met Gly Ile Cys		
130	135	140
His Pro Ile Arg Ser Leu Lys Trp Val Lys Thr Lys His Ala Arg Leu		
145	150	155
Ile Cys Val Gly Val Trp Leu Val Val Thr Ile Cys Leu Ile Pro Asn		
165	170	175
Leu Ile Phe Val Thr Thr Ser Ser Lys Asp Asn Ser Thr Leu Cys His		
180	185	190
Asp Thr Thr Lys Pro Glu Glu Phe Asp His Tyr Val His Tyr Ser Ser		
195	200	205
Ser Ile Met Ala Leu Leu Phe Gly Ile Pro Phe Leu Val Ile Val Val		
210	215	220
Cys Tyr Cys Leu Met Ala Lys Arg Leu Cys Lys Arg Ser Phe Pro Ser		
225	230	235
Pro Ser Pro Arg Val Pro Ser Tyr Lys Lys Arg Ser Ile Lys Met Ile		
245	250	255
Ile Ile Val Leu Thr Val Phe Ala Ile Cys Phe Val Pro Phe His Ile		
260	265	270
Thr Arg Thr Leu Tyr Tyr Thr Ser Arg Tyr Phe Gln Ala Asp Cys Gln		
275	280	285
Thr Leu Asn Ile Ile Asn Phe Thr Tyr Lys Ile Thr Arg Pro Leu Ala		
290	295	300
Ser Ile Asn Ser Cys Leu Asp Pro Ile Leu Tyr Phe Met Ala Gly Asp		
305	310	315
Lys Tyr Arg Gly Arg Leu Arg Arg Gly Ala Ala Gln Arg Pro Arg Pro		
325	330	335
Val Pro Thr Ser Leu Leu Ala Leu Val Ser Pro Ser Val Asp Ser Ser		
340	345	350
Val Val Gly Ser Cys Cys Asn Ser Glu Ser Arg Gly Met Gly Thr Val		
355	360	365
Trp Ser Arg Gly Gly Gln		
370		

<210> 12
 <211> 537
 <212> PRT
 <213> XENOPUS LAEVIS

<400> 12

Met Thr Glu Asp Ile Met Ala Thr Ser Tyr Pro Thr Phe Leu Thr Thr
1 5 10 15
Pro Tyr Leu Pro Met Lys Leu Leu Met Asn Leu Thr Asn Asp Thr Glu
20 25 30
Asp Ile Cys Val Phe Asp Glu Gly Phe Lys Phe Leu Leu Leu Pro Val
35 40 45
Ser Tyr Ser Ala Val Phe Met Val Gly Leu Pro Leu Asn Ile Ala Ala
50 55 60
Met Trp Ile Phe Ile Ala Lys Met Arg Pro Trp Asn Pro Thr Thr Val
65 70 75 80
Tyr Met Phe Asn Leu Ala Leu Ser Asp Thr Leu Tyr Val Leu Ser Leu
85 90 95
Pro Thr Leu Val Tyr Tyr Tyr Ala Asp Lys Asn Asn Trp Pro Phe Gly
100 105 110
Glu Val Leu Cys Lys Leu Val Arg Phe Leu Phe Tyr Ala Asn Leu Tyr
115 120 125
Ser Ser Ile Leu Phe Leu Thr Cys Ile Ser Val His Arg Tyr Arg Gly
130 135 140
Val Cys His Pro Ile Thr Ser Leu Arg Arg Met Asn Ala Lys His Ala
145 150 155 160
Tyr Val Ile Cys Ala Leu Val Trp Leu Ser Val Thr Leu Cys Leu Val
165 170 175
Pro Asn Leu Ile Phe Val Thr Val Ser Pro Lys Val Lys Asn Thr Ile
180 185 190
Cys His Asp Thr Thr Arg Pro Glu Asp Phe Ala Arg Tyr Val Glu Tyr
195 200 205
Ser Thr Ala Ile Met Cys Leu Leu Phe Gly Ile Pro Cys Leu Ile Ile
210 215 220
Ala Gly Cys Tyr Gly Leu Met Thr Arg Glu Leu Met Lys Pro Ile Val
225 230 235 240
Ser Gly Asn Gln Gln Thr Leu Pro Ser Tyr Lys Lys Arg Ser Ile Lys
245 250 255
Thr Ile Ile Phe Val Met Ile Ala Phe Ala Ile Cys Phe Met Pro Phe
260 265 270
His Ile Thr Arg Thr Leu Tyr Tyr Tyr Ala Arg Leu Leu Gly Ile Lys
275 280 285

Cys Tyr Ala Leu Asn Val Ile Asn Val Thr Tyr Lys Val Thr Arg Pro
290 295 300

Leu Ala Ser Ala Asn Ser Cys Ile Asp Pro Ile Leu Tyr Phe Leu Ala
305 310 315 320

Asn Asp Arg Tyr Arg Arg Arg Leu Ile Arg Thr Val Arg Arg Arg Ser
325 330 335

Ser Val Pro Asn Arg Arg Cys Met His Thr Asn His Pro Gln Thr Glu
340 345 350

Pro His Met Thr Ala Gly Pro Leu Pro Val Ile Ser Ala Glu Glu Ile
355 360 365

Pro Ser Asn Gly Ser Met Val Arg Asp Glu Asn Gly Glu Gly Ser Arg
370 375 380

Glu His Arg Val Glu Trp Thr Asp Thr Lys Glu Ile Asn Gln Met Met
385 390 395 400

Asn Arg Arg Ser Thr Ile Lys Arg Asn Ser Thr Asp Lys Asn Asp Met
405 410 415

Lys Glu Asn Arg His Gly Glu Asn Tyr Leu Pro Tyr Val Glu Val Val
420 425 430

Glu Lys Glu Asp Tyr Glu Thr Lys Arg Glu Asn Arg Lys Thr Thr Glu
435 440 445

Gln Ser Ser Lys Thr Asn Ala Glu Gln Asp Glu Leu Gln Thr Gln Ile
450 455 460

Asp Ser Arg Leu Lys Arg Gly Lys Trp Gln Leu Ser Ser Lys Lys Gly
465 470 475 480

Ala Ala Gln Glu Asn Glu Lys Gly His Met Glu Pro Ser Phe Glu Gly
485 490 495

Glu Gly Thr Ser Thr Trp Asn Leu Leu Thr Pro Lys Met Tyr Gly Lys
500 505 510

Lys Asp Arg Leu Ala Lys Asn Val Glu Glu Val Gly Tyr Gly Lys Glu
515 520 525

Lys Glu Leu Gln Asn Phe Pro Lys Ala
530 535

<210> 13

<211> 3/4

<212> PRT

<213> RATTUS NORVEGICUS

<400> 13

Met Ala Ala Gly Leu Asp Ser Trp Asn Ser Thr Ile Asn Gly Thr Trp
1 5 10 15

10010568-120701

Glu	Gly	Asp	Glu	Leu	Gly	Tyr	Lys	Cys	Arg	Phe	Asn	Glu	Asp	Phe	Lys
			20					25					30		
Tyr	Val	Leu	Leu	Pro	Val	Ser	Tyr	Gly	Val	Val	Cys	Val	Leu	Gly	Leu
		35					40					45			
Cys	Leu	Asn	Val	Val	Ala	Leu	Tyr	Ile	Phe	Leu	Cys	Arg	Leu	Lys	Thr
	50						55				60				
Trp	Asn	Ala	Ser	Thr	Thr	Tyr	Met	Phe	His	Leu	Ala	Val	Ser	Asp	Ser
65					70					75					80
Leu	Tyr	Ala	Ala	Ser	Leu	Pro	Leu	Leu	Val	Tyr	Tyr	Tyr	Ala	Gln	Gly
				85					90					95	
Asp	His	Trp	Pro	Phe	Ser	Thr	Val	Leu	Cys	Lys	Leu	Val	Arg	Phe	Leu
			100					105					110		
Phe	Tyr	Thr	Asn	Leu	Tyr	Cys	Ser	Ile	Leu	Phe	Leu	Thr	Cys	Ile	Ser
		115					120					125			
Val	His	Arg	Cys	Leu	Gly	Val	Leu	Arg	Pro	Leu	His	Ser	Leu	Ser	Trp
	130					135					140				
Gly	His	Ala	Arg	Tyr	Ala	Arg	Arg	Val	Ala	Ala	Val	Val	Trp	Val	Leu
145					150				155						160
Val	Leu	Ala	Cys	Gln	Ala	Pro	Val	Leu	Tyr	Phe	Val	Thr	Thr	Ser	Val
				165					170					175	
Arg	Gly	Thr	Arg	Ile	Thr	Cys	His	Asp	Thr	Ser	Ala	Arg	Glu	Leu	Phe
			180					185					190		
Ser	His	Phe	Val	Ala	Tyr	Ser	Ser	Val	Met	Leu	Gly	Leu	Leu	Phe	Ala
		195					200					205			
Val	Pro	Phe	Ser	Ile	Ile	Leu	Val	Cys	Tyr	Val	Leu	Met	Ala	Arg	Arg
	210					215					220				
Leu	Leu	Lys	Pro	Ala	Tyr	Gly	Thr	Thr	Gly	Leu	Pro	Arg	Ala	Lys	Arg
225					230					235					240
Lys	Ser	Val	Arg	Thr	Ile	Ala	Leu	Val	Leu	Ala	Val	Phe	Ala	Leu	Cys
				245					250					255	
Phe	Leu	Pro	Phe	His	Val	Thr	Arg	Thr	Leu	Tyr	Tyr	Ser	Phe	Arg	Ser
			260					265					270		
Leu	Asp	Leu	Ser	Cys	His	Thr	Leu	Asn	Ala	Ile	Asn	Met	Ala	Tyr	Lys
	275						280					285			
Ile	Thr	Arg	Pro	Leu	Ala	Ser	Ala	Asn	Ser	Cys	Leu	Asp	Pro	Val	Leu
	290					295					300				
Tyr	Phe	Leu	Ala	Gly	Gln	Arg	Leu	Val	Arg	Phe	Ala	Arg	Asp	Ala	Lys
305					310					315					320

Pro Ala Thr Glu Pro Thr Pro Ser Pro Gln Ala Arg Arg Lys Leu Gly
325 330 335

Leu His Arg Pro Asn Arg Thr Asp Thr Val Arg Lys Asp Leu Ser Ile
340 345 350

Ser Ser Asp Asp Ser Arg Arg Thr Glu Ser Thr Pro Ala Gly Ser Glu
355 360 365

Thr Lys Asp Ile Arg Leu
370

<210> 14

<211> 328

<212> PRT

<213> GALLUS GALLUS

<400> 14

Met Ser Met Ala Asn Phe Thr Gly Gly Arg Asn Ser Cys Thr Phe His
1 5 10 15

Glu Glu Phe Lys Gln Val Leu Leu Pro Leu Val Tyr Ser Val Val Phe
20 25 30

Leu Leu Gly Leu Pro Leu Asn Ala Val Val Ile Gly Gln Ile Trp Leu
35 40 45

Ala Arg Lys Ala Leu Thr Arg Thr Thr Ile Tyr Met Leu Asn Leu Ala
50 55 60

Met Ala Asp Leu Leu Tyr Val Cys Ser Leu Pro Leu Leu Ile Tyr Asn
65 70 75 80

Tyr Thr Gln Lys Asp Tyr Trp Pro Phe Gly Asp Phe Thr Cys Lys Phe
85 90 95

Val Arg Phe Gln Phe Tyr Thr Asn Leu His Gly Ser Ile Leu Phe Leu
100 105 110

Thr Cys Ile Ser Val Gln Arg Tyr Met Gly Ile Cys His Pro Leu Ala
115 120 125

Ser Trp His Lys Lys Lys Gly Lys Lys Leu Thr Trp Leu Val Cys Ala
130 135 140

Ala Val Trp Phe Ile Val Ile Ala Gln Cys Leu Pro Thr Phe Val Phe
145 150 155 160

Ala Ser Thr Gly Thr Gln Arg Asn Arg Thr Val Cys Tyr Asp Leu Ser
165 170 175

Pro Pro Asp Arg Ser Thr Ser Tyr Phe Pro Tyr Gly Ile Thr Leu Thr
180 185 190

Ile Thr Gly Phe Leu Leu Pro Phe Ala Ala Ile Leu Ala Cys Tyr Cys

195 200 205

Ser Met Ala Arg Ile Leu Cys Gln Lys Asp Glu Leu Ile Gly Leu Ala
210 215 220

Val His Lys Lys Lys Asp Lys Ala Val Arg Met Ile Ile Ile Val Val
225 230 235 240

Ile Val Phe Ser Ile Ser Phe Phe Pro Phe His Leu Thr Lys Thr Ile
245 250 255

Tyr Leu Ile Val Arg Ser Ser Ala Ser Leu Pro Cys Pro Thr Leu Gln
260 265 270

Ala Phe Ala Ile Ala Tyr Lys Cys Thr Arg Pro Phe Ala Ser Met Asn
275 280 285

Ser Val Leu Asp Pro Ile Leu Phe Tyr Phe Thr Gln Arg Lys Phe Arg
290 295 300

Glu Ser Thr Arg Tyr Leu Leu Asp Lys Met Ser Ser Lys Trp Arg Gln
305 310 315 320

Asp His Cys Ile Ser Tyr Gly Ser
325

<210> 15
<211> 8
<212> PRT
<213> bacteriophage T7

<400> 15

Asp Tyr Lys Asp Asp Asp Lys
1 5

<210> 16
<211> 733
<212> DNA
<213> homo sapiens

<400> 16
gggatccgga gcccaaatct tctgacaaaa ctcacacatg ccacccgtgc ccagcacctg 60
aattcgaggg tgcaccgtca gtcttctct tcccccaaa acccaaggac accctcatga 120
tctcccgga tcttgaggtc' acatgcgtgg tgggtggacgt aagccacgaa gacccctgagg 180
tcaagttcaa ctgglacgtg gacggcgtgg aggtgcataa tgccaagaca aagccgcggg 240
aggagcagta caacagcacg taccgtgtgg tcagcgtcct caccgtcctg caccaggact 300
ggctgaatgg caaggagtac aagtgaagg tctccaacaa agccctccca acccccatcg 360
agaaaaccat ctccaaagcc aaagggcagc cccgagaacc acaggtgtac accctgcccc 420
catcccgga tgagctgacc aagaaccagg tcagcctgac ctgcctggtc aaaggcttct 480

atccaagcga catcgccgtg gagggggaga gcaatgggca gccggagaac aactacaaga 540
ccacgcctcc cgtgctggac tccgacggct ccttcttctt ctacagcaag ctcaccgtgg 600
acaagagcag gtggcagcag gggaacgtct tctcatgctc cgtgatgcat gaggctctgc 660
acaaccacta cagcagaag agcctctccc tgtctccggg taaatgagtg cgacggccgc 720
gactctagag gat 733

<210> 17
<211> 26
<212> PRT
<213> homo sapiens

<400> 17

Tyr Leu Pro Val Ile Tyr Gly Ile Ile Phe Leu Val Gly Phe Pro Gly
1 5 10 15

Asn Ala Val Val Ile Ser Thr Tyr Ile Phe
20 25

<210> 18
<211> 30
<212> PRT
<213> homo sapiens

<400> 18

Ser Ser Thr Ile Ile Met Leu Asn Leu Ala Cys Thr Asp Leu Leu Tyr
1 5 10 15

Leu Thr Ser Leu Pro Phe Leu Ile His Tyr Tyr Ala Ser Gly
20 25 30

<210> 19
<211> 22
<212> PRT
<213> homo sapiens

<400> 19

Phe Asn Leu Tyr Ser Ser Ile Leu Phe Leu Thr Cys Phe Ser Ile Phe
1 5 10 15

Arg Tyr Cys Val Ile Ile
20

<210> 20
<211> 23
<212> PRT
<213> homo sapiens

<400> 20

Ala Val Val Ala Cys Ala Val Val Trp Ile Ile Ser Leu Val Ala Val
1 5 10 15

Ile Pro Met Thr Phe Leu Ile
20

<210> 21
<211> 21
<212> PRT
<213> homo sapiens

<400> 21

Trp Tyr Asn Leu Ile Leu Thr Ala Thr Thr Phe Cys Leu Pro Leu Val
1 5 10 15

Ile Val Thr Leu Cys
20

<210> 22
<211> 22
<212> PRT
<213> homo sapiens

<400> 22

Leu Thr Ile Leu Leu Leu Leu Ala Phe Tyr Val Cys Phe Leu Pro Phe
1 5 10 15

His Ile Leu Arg Val Ile
20

<210> 23
<211> 20
<212> PRT
<213> homo sapiens

<400> 23

Val Ser Arg Pro Leu Ala Ala Leu Asn Thr Phe Gly Asn Leu Leu Leu
1 5 10 15

Tyr Val Val Val
20

<210> 24
<211> 14
<212> PRT
<213> homo sapiens

<400> 24

Leu Asp Tyr Leu Ala Asn Ala Ser Asp Phe Pro Asp Tyr Ala
1 5 10

<210> 25

<211> 14
<212> PRT
<213> homo sapiens

<400> 25

Ala Ala Ala Phe Gly Asn Cys Thr Asp Glu Asn Ile Pro Leu
1 5 10

<210> 26
<211> 14
<212> PRT
<213> homo sapiens

<400> 26

Leu Ile Thr Ser Thr Asn Arg Thr Asn Arg Ser Ala Cys Leu
1 5 10

<210> 27
<211> 14
<212> PRT
<213> homo sapiens

<400> 27

Ser Thr Asn Arg Thr Asn Arg Ser Ala Cys Leu Asp Leu Thr
1 5 10

<210> 28
<211> 13
<212> PRT
<213> homo sapiens

<400> 28

Phe Leu Ile Thr Ser Thr Asn Arg Thr Asn Arg Ser Ala
1 5 10

<210> 29
<211> 13
<212> PRT
<213> homo sapiens

<400> 29

Thr Ser Thr Asn Arg Thr Asn Arg Ser Ala Cys Leu Asp
1 5 10

<210> 30
<211> 13
<212> PRT
<213> homo sapiens

<400> 30

Ser Asp Glu Leu Asn Thr Ile Lys Trp Tyr Asn Leu Ile

1 5 10

<210> 31
<211> 13
<212> PRT
<213> homo sapiens

<400> 31

Gln Ala Val Cys Ser Thr Val Arg Cys Lys Val Ser Gly
1 5 10

<210> 32
<211> 22
<212> DNA
<213> homo sapiens

<400> 32
cttgcaagat gaaaggagac aa

22

<210> 33
<211> 20
<212> DNA
<213> homo sapiens

<400> 33
aatatttcaa gggttgtttg

20

<210> 34
<211> 20
<212> DNA
<213> homo sapiens

<400> 34
gatcagcctg tctcgaccto

20

<210> 35
<211> 20
<212> DNA
<213> homo sapiens

<400> 35
gatccgaatg accctcaaga

20

<210> 36
<211> 36
<212> DNA
<213> Homo sapiens

<400> 36
ccgctagcgc atgaatgagc cactagacta tttagc

36

```
<210> 37
<211> 68
<212> DNA
<213> Homo sapiens
```

```
<400> 37
cgggatccct attacttgtc gtcgctgctc ttgtagttca tagggttggt tgagtaacta    60
atattcttt                                     68
```

```
<210> 38
<211> 24
<212> DNA
<213> Homo sapiens
```

```
<400> 38
gaggatgagg agagctatga caca 24
```

```
<210> 39
<211> 22
<212> DNA
<213> Homo sapiens
```

```
<400> 39
cccttlgcac tcataacgtc ag                22
```

```
<210> 40
<211> 29
<212> DNA
<213> Homo sapiens
```

```
<400> 40
aaacacacag tcatcatagg gcagctcgt 29
```

```
<210> 41
<211> 39
<212> DNA
<213> Homo sapiens
```

```
<400> 41
gcagcagcgg ccgcatgcac tacctccctg ttatttatg 39
```

```
<210> 42
<211> 37
<212> DNA
<213> Homo sapiens
```

```
<400> 42
gcagcagtcg acaggggttg ttgagtaact aattttc 37
```

<210> 43

<211> 39
<212> DNA
<213> Homo sapiens

<400> 43
gcagcagcgg ccgcatgaat gagccactag actalttag 39

<210> 44
<211> 34
<212> DNA
<213> Homo sapiens

<400> 44
gcagcagtcg acgaccacca catatagtaa cagg 34

<210> 45
<211> 6
<212> PRT
<213> Homo sapiens

<400> 45
Lys Met Arg Pro Trp Lys
1 5

<210> 46
<211> 18
<212> PRT
<213> Homo sapiens

<400> 46
Glu Asn Trp Ile Phe Gly Asp Phe Met Cys Lys Phe Ile Arg Phe Ser
1 5 10 15

Phe His

<210> 47
<211> 18
<212> PRT
<213> Homo sapiens

<400> 47
His Pro Met Ser Cys Phe Ser Ile His Lys Thr Arg Cys Ala Val Val
1 5 10 15

Ala Cys

<210> 48
<211> 24
<212> PRT
<213> Homo sapiens

<400> 48

Thr Ser Thr Asn Arg Thr Asn Arg Ser Ala Cys Leu Asp Leu Thr Ser
1 5 10 15

Ser Asp Glu Leu Asn Thr Ile Lys
20

<210> 49

<211> 24

<212> PRT

<213> Homo sapiens

<400> 49

Tyr Thr Thr Ile Ile His Thr Leu Thr His Gly Leu Gln Thr Asp Ser
1 5 10 15

Cys Leu Lys Gln Lys Ala Arg Arg
20

<210> 50

<211> 22

<212> PRT

<213> Homo sapiens

<400> 50

Arg Ile Glu Ser Arg Leu Leu Ser Ile Ser Cys Ser Ile Glu Asn Gln
1 5 10 15

Ile His Glu Ala Tyr Ile
20

<210> 51

<211> 25

<212> DNA

<213> Artificial

<220>

<223> Synthesized Oligonucleotide.

<400> 51

cttcaccagg uaacaggcca gcaug

25

<210> 52

<211> 25

<212> DNA

<213> Artificial

<220>

<223> Synthesized Oligonucleotide.

<400> 52

ttcagcaatg gcaucuccug cagcc

25

<210> 53
<211> 25
<212> DNA
<213> Artificial

<220>
<223> Synthesized Oligonucleotide.

<400> 53
aagactgctu ucuccugcuc auagg 25

<210> 54
<211> 25
<212> DNA
<213> Artificial

<220>
<223> Synthesized Oligonucleotide.

<400> 54
atctctggcc ccaucgacaa caugg 25

<210> 55
<211> 25
<212> DNA
<213> Artificial

<220>
<223> Synthesized Oligonucleotide.

<400> 55
acttcagtgu cuucagccaa uggga 25

10010560.120701